***WITHOUT FILTER AND NOISE:***

***Image set:***

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| **Image 1** |
| ***C:\Users\ABC\OneDrive\Pictures\Screenshots\Screenshot (91).png*** |
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| **Image 2** |
| ***C:\Users\ABC\OneDrive\Pictures\Screenshots\Screenshot (93).png*** |
| **Image 3** |
| ***C:\Users\ABC\OneDrive\Pictures\Screenshots\Screenshot (95).png*** |
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| **Image 4** |
| ***C:\Users\ABC\OneDrive\Pictures\Screenshots\Screenshot (97).png*** |
| **Image 5** |
| ***C:\Users\ABC\OneDrive\Pictures\Screenshots\Screenshot (99).png*** |
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| **Image 6** |
| ***C:\Users\ABC\OneDrive\Pictures\Screenshots\Screenshot (102).png*** |
| **Image 7** |
| ***C:\Users\ABC\OneDrive\Pictures\Screenshots\Screenshot (103).png*** |
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**DATA FILES**

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| **Image 1** |
| Original image ideal values:  IM1 image entropy:5.608435e-01  IM1 image mean:0.131245  Ground truth image entropy:0.968631  Ground truth image mean:0.396113  entropy between imt and im1 :0.896052  MSE between imt and im1 :0.360157  Average Difference between imt and im1 :0.264868  Maximum Difference between imt and im1 :1.000000  True Positive values:4220.000000  False Positive values: 2405.000000  True Negative values:28078.000000  False Negative values:15775.000000  Accuracy value: 0.639843  F Measure values:0.317055  Peak Signal-to Noise Ration value: 4.435083  Signal-to Noise Ration value: -4.797355  percentage of pixels that were correctly detected (Pco): 0.211053  The percentage of pixels that were not detected (Pnd):0.788947  the percentage of false alarm: (Pfa):0.120280  Euclidean Distance Value :20.137997 |
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| **Image 2** |
| Original image ideal values:  IM1 image entropy:1.814430e-01  IM1 image mean:0.027451  Ground truth image entropy:0.596365  Ground truth image mean:0.144680  entropy between imt and im1 :0.568977  MSE between imt and im1 :0.151269  Average Difference between imt and im1 :0.117229  Maximum Difference between imt and im1 :1.000000  True Positive values:524.000000  False Positive values: 855.000000  True Negative values:42112.000000  False Negative values:6744.000000  Accuracy value: 0.848731  F Measure values:0.121198  Peak Signal-to Noise Ration value: 8.202500  Signal-to Noise Ration value: -7.218507  percentage of pixels that were correctly detected (Pco): 0.072097  The percentage of pixels that were not detected (Pnd):0.927903  the percentage of false alarm: (Pfa):0.117639  Euclidean Distance Value :6.360153 |
| **Image 3** |
| Original image ideal values:    IM1 image entropy:4.039648e-01  IM1 image mean:0.080507  Ground truth image entropy:0.717315  Ground truth image mean:0.197705  entropy between imt and im1 :0.650356  MSE between imt and im1 :0.216423  Average Difference between imt and im1 :0.117198  Maximum Difference between imt and im1 :1.000000  True Positive values:1578.000000  False Positive values: 2534.000000  True Negative values:38444.000000  False Negative values:8520.000000  Accuracy value: 0.783577  F Measure values:0.222097  Peak Signal-to Noise Ration value: 6.646974  Signal-to Noise Ration value: -3.901823  percentage of pixels that were correctly detected (Pco): 0.156269  The percentage of pixels that were not detected (Pnd):0.843731  the percentage of false alarm: (Pfa):0.250941  Euclidean Distance Value :14.677671 |
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| **Image 4** |
| Original image ideal values:  IM1 image entropy:6.760051e-01  IM1 image mean:0.178146  Ground truth image entropy:0.943520  Ground truth image mean:0.361012  entropy between imt and im1 :0.872331  MSE between imt and im1 :0.402767  Average Difference between imt and im1 :0.182865  Maximum Difference between imt and im1 :1.000000  True Positive values:17877.000000  False Positive values: 28823.000000  True Negative values:138684.000000  False Negative values:76760.000000  Accuracy value: 0.597233  F Measure values:0.252970  Peak Signal-to Noise Ration value: 3.949459  Signal-to Noise Ration value: -3.067441  percentage of pixels that were correctly detected (Pco): 0.188901  The percentage of pixels that were not detected (Pnd):0.811099  the percentage of false alarm: (Pfa):0.304564  Euclidean Distance Value :17.930356 |
| **Image 5** |
| Original image ideal values:    IM1 image entropy:2.581451e-01  IM1 image mean:0.043507  Ground truth image entropy:0.633825  Ground truth image mean:0.159798  entropy between imt and im1 :0.597284  MSE between imt and im1 :0.173786  Average Difference between imt and im1 :0.116291  Maximum Difference between imt and im1 :1.000000  True Positive values:3869.000000  False Positive values: 7536.000000  True Negative values:212718.000000  False Negative values:38021.000000  Accuracy value: 0.826214  F Measure values:0.145192  Peak Signal-to Noise Ration value: 7.599848  Signal-to Noise Ration value: -5.650151  percentage of pixels that were correctly detected (Pco): 0.092361  The percentage of pixels that were not detected (Pnd):0.907639  the percentage of false alarm: (Pfa):0.179900  Euclidean Distance Value :8.337461 |
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| **Image 6** |
| Original image ideal values:  IM1 image entropy:4.329298e-01  IM1 image mean:0.088942  Ground truth image entropy:0.815119  Ground truth image mean:0.252438  entropy between imt and im1 :0.765075  MSE between imt and im1 :0.281913  Average Difference between imt and im1 :0.163496  Maximum Difference between imt and im1 :1.000000  True Positive values:1494.000000  False Positive values: 2975.000000  True Negative values:34587.000000  False Negative values:11190.000000  Accuracy value: 0.718087  F Measure values:0.174197  Peak Signal-to Noise Ration value: 5.498849  Signal-to Noise Ration value: -4.530459  percentage of pixels that were correctly detected (Pco): 0.117786  The percentage of pixels that were not detected (Pnd):0.882214  the percentage of false alarm: (Pfa):0.234547  Euclidean Distance Value :10.853280 |
| **Image 7** |
| Original image ideal values:    IM1 image entropy:3.374431e-01  IM1 image mean:0.062539  Ground truth image entropy:0.999293  Ground truth image mean:0.484350  entropy between imt and im1 :0.990311  MSE between imt and im1 :0.462423  Average Difference between imt and im1 :0.421810  Maximum Difference between imt and im1 :1.000000  True Positive values:4717.000000  False Positive values: 2268.000000  True Negative values:55325.000000  False Negative values:49380.000000  Accuracy value: 0.537577  F Measure values:0.154448  Peak Signal-to Noise Ration value: 3.349608  Signal-to Noise Ration value: -8.890068  percentage of pixels that were correctly detected (Pco): 0.087195  The percentage of pixels that were not detected (Pnd):0.912805  the percentage of false alarm: (Pfa):0.041925  Euclidean Distance Value :7.826992 |